

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Robert A. Sanderson, et al.

Art Unit : 3747

Serial No. : 09/696,139

Examiner : Kamen

Filed : October 25, 2000

Confirmation No.: 2871

Title : PISTON ENGINE ASSEMBLY

Notice of Allowance Date: July 31, 2003

Attention: Official Draftsman
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF FORMAL DRAWINGS

In response to the Notice of Allowance mailed July 31, 2003, please substitute the enclosed 31 sheets of formal drawings for the corresponding drawings presently in the application.

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: October 30, 2003
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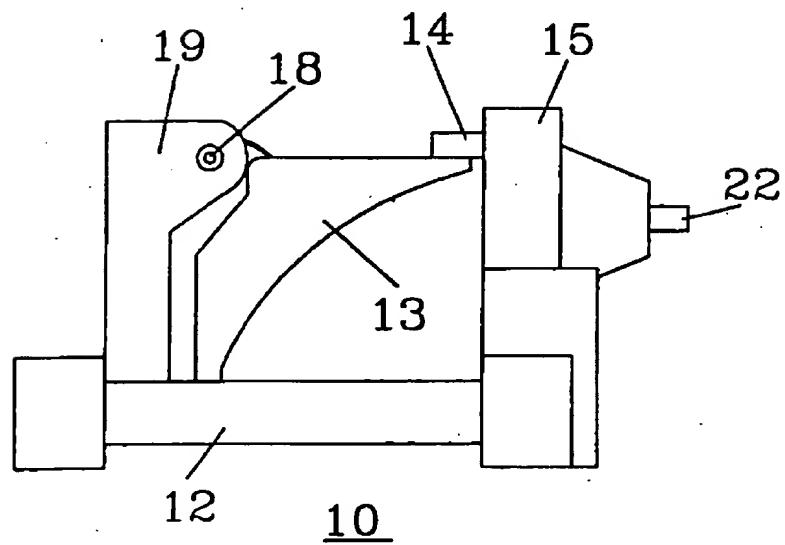


FIG. 1

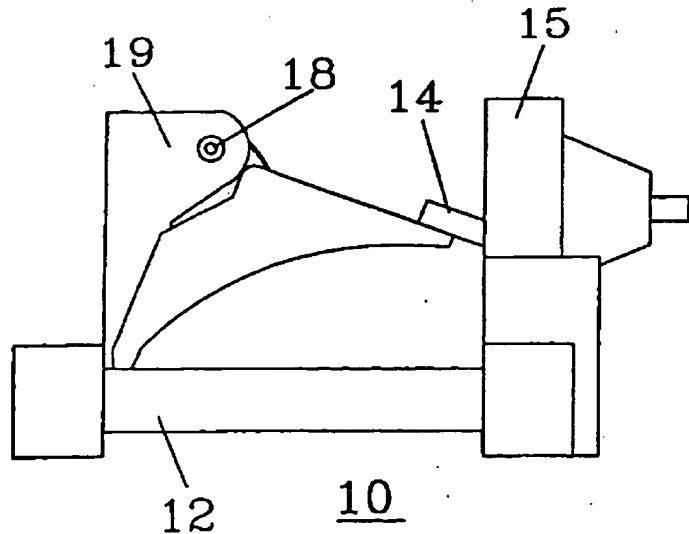


FIG. 2

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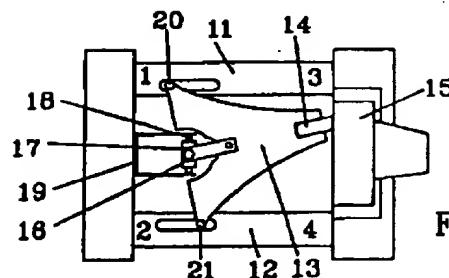


FIG. 3

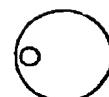


FIG. 3a

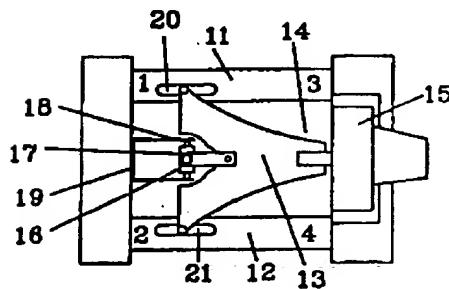


FIG. 4

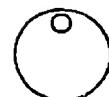


FIG. 4a

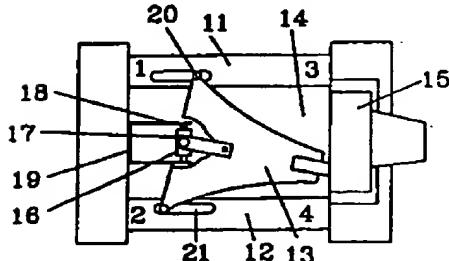


FIG. 5

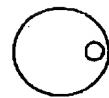


FIG. 5a

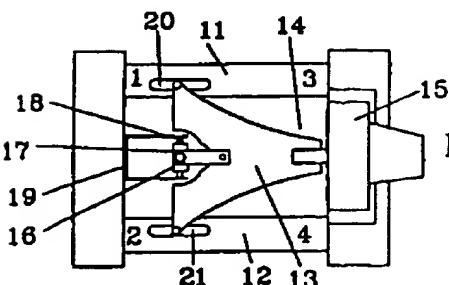


FIG. 6

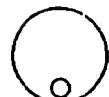


FIG. 6a

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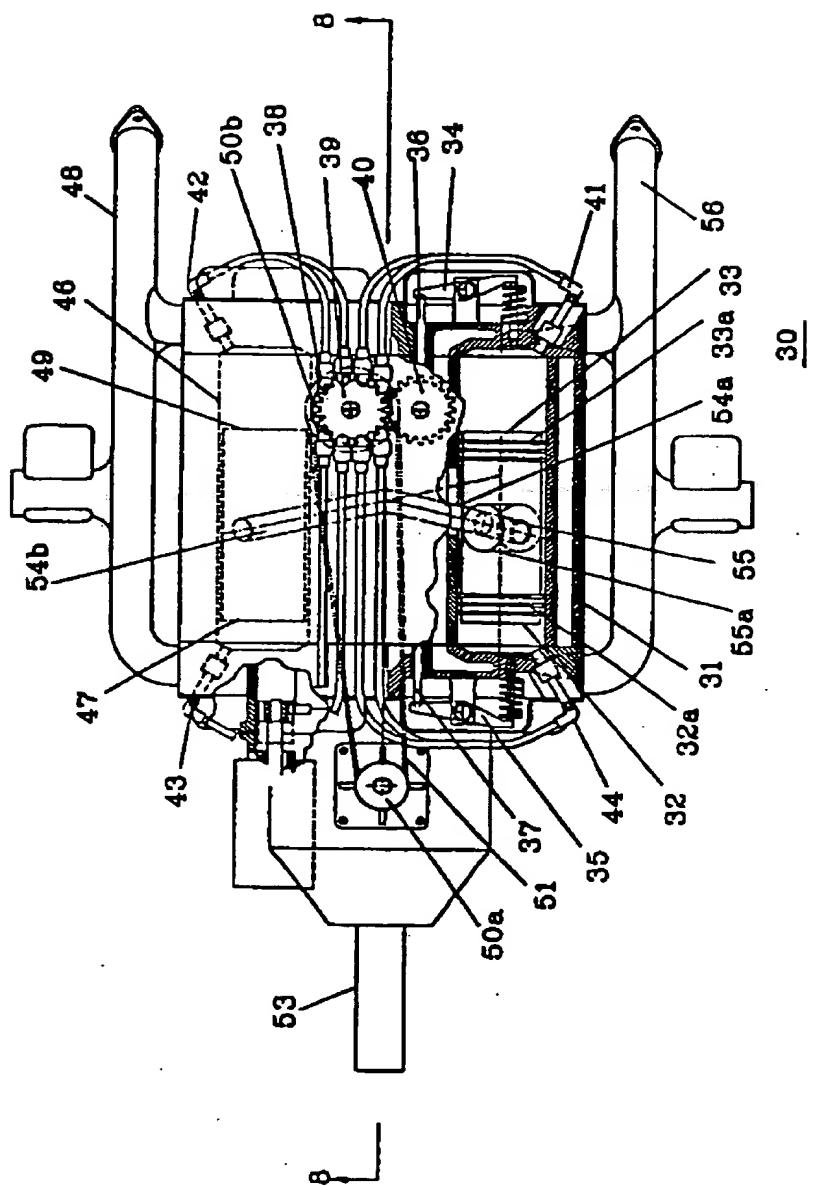


FIG. 7

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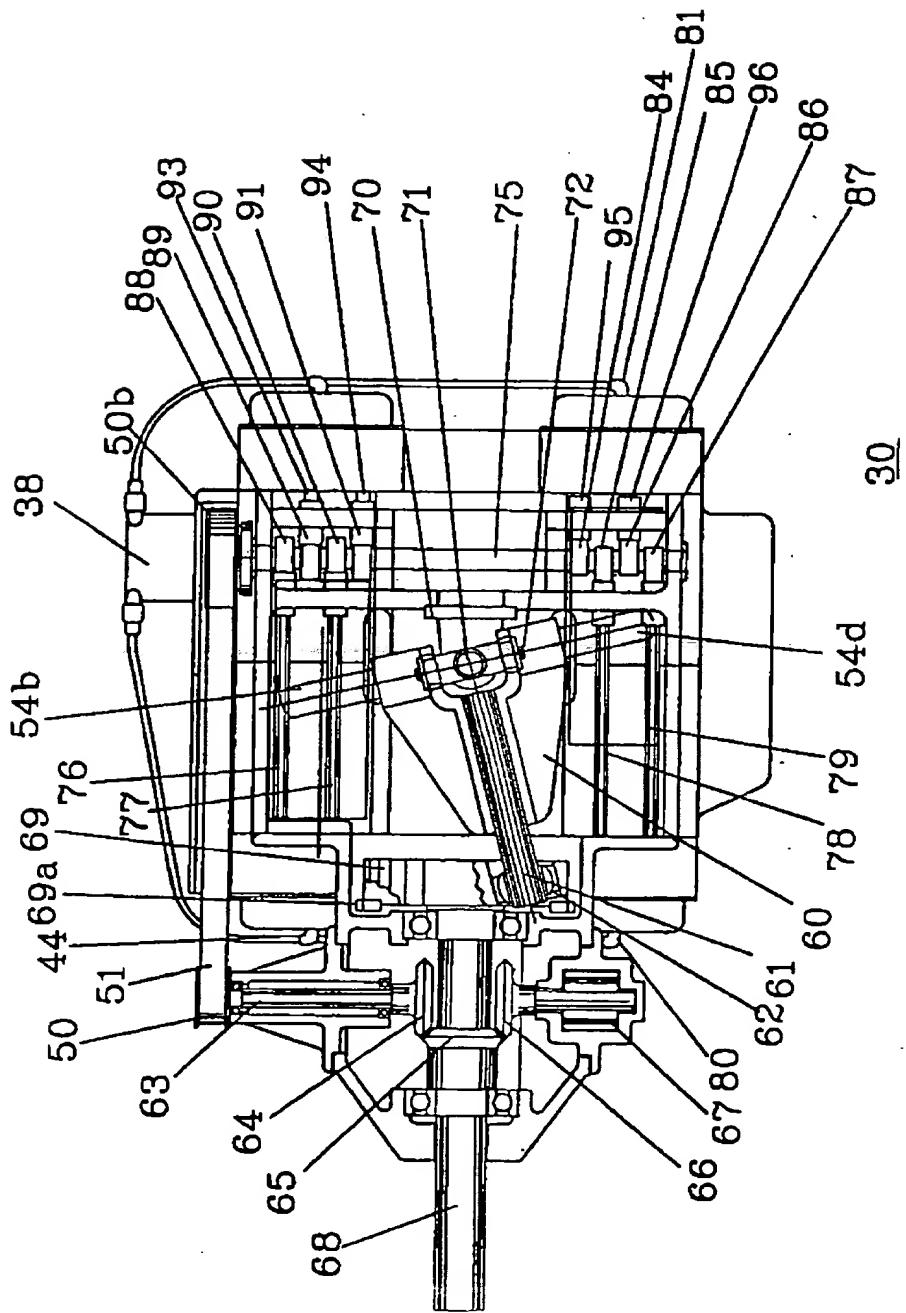
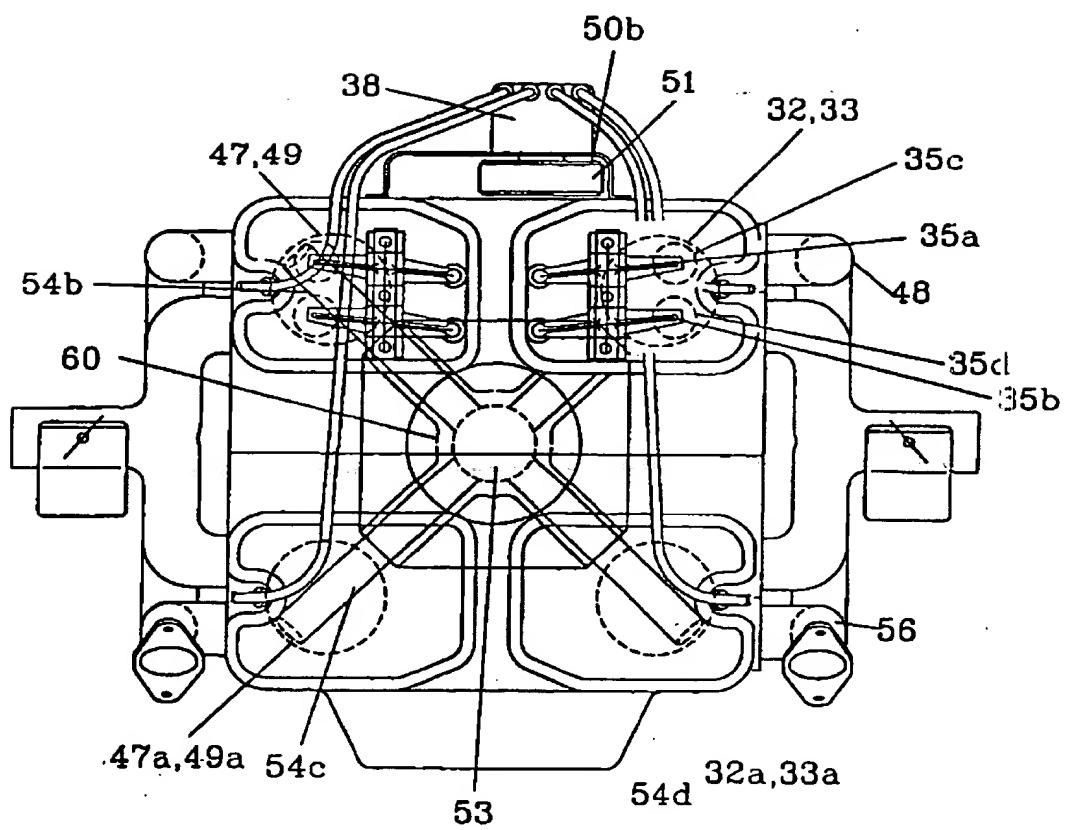


FIG. 8

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FIG. 9

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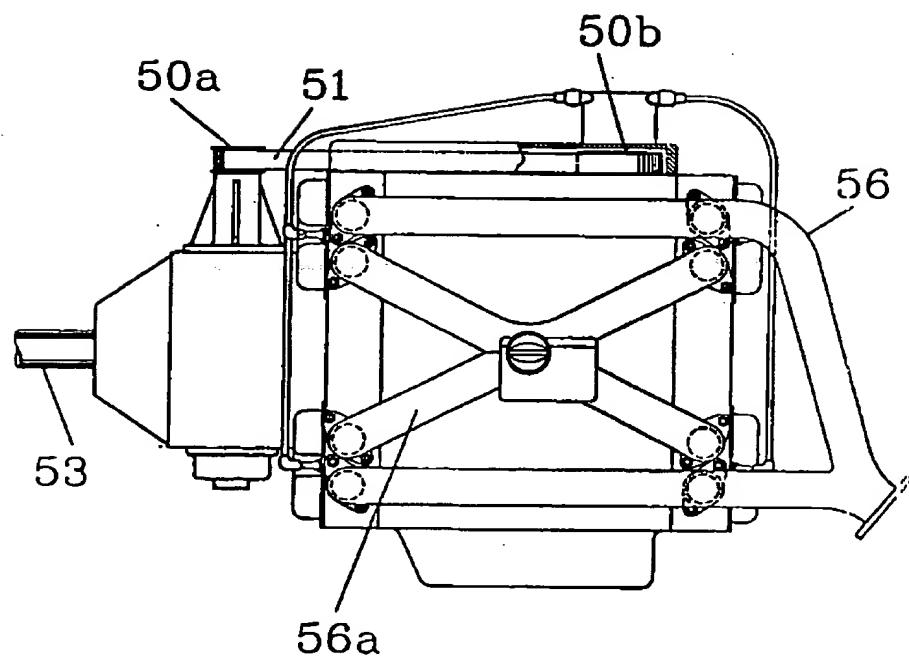


FIG. 10

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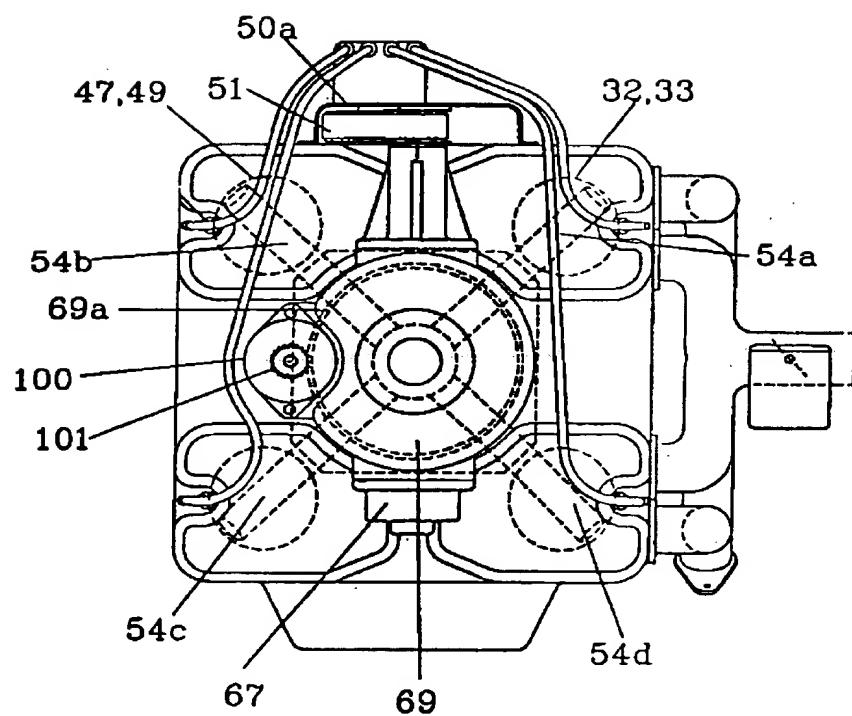


FIG. 11

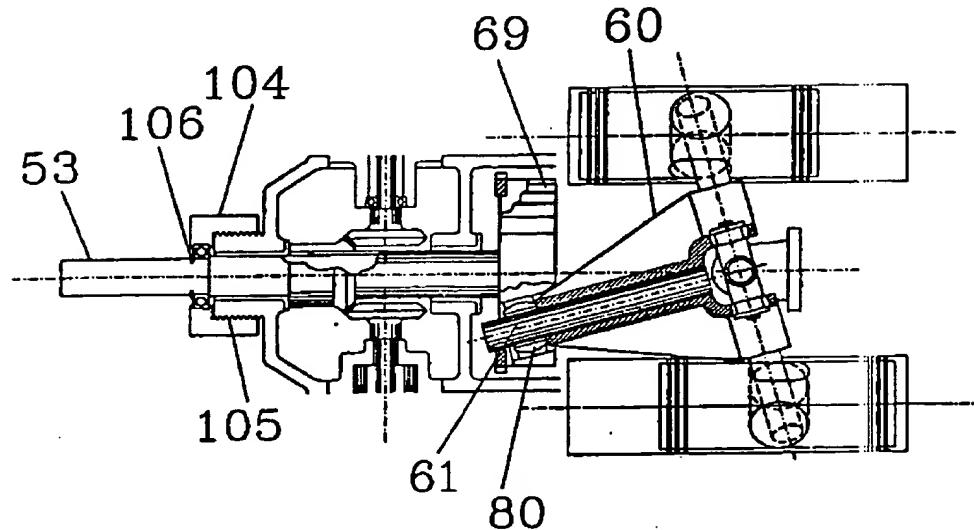


FIG. 12

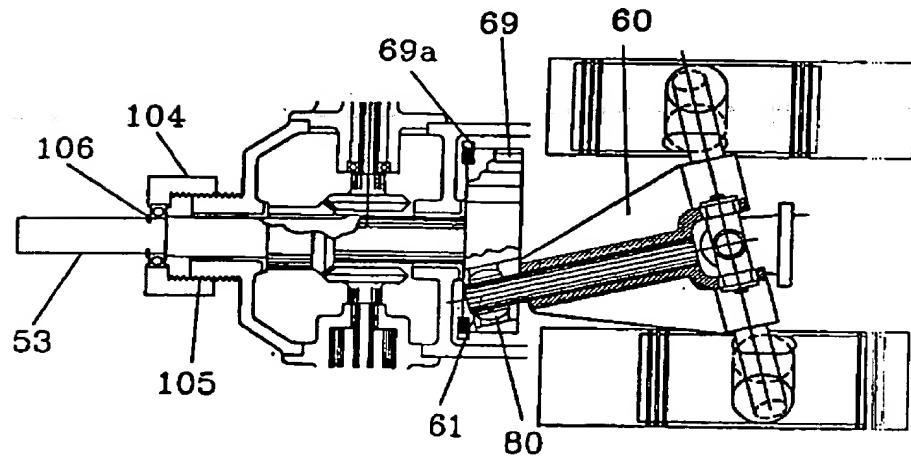
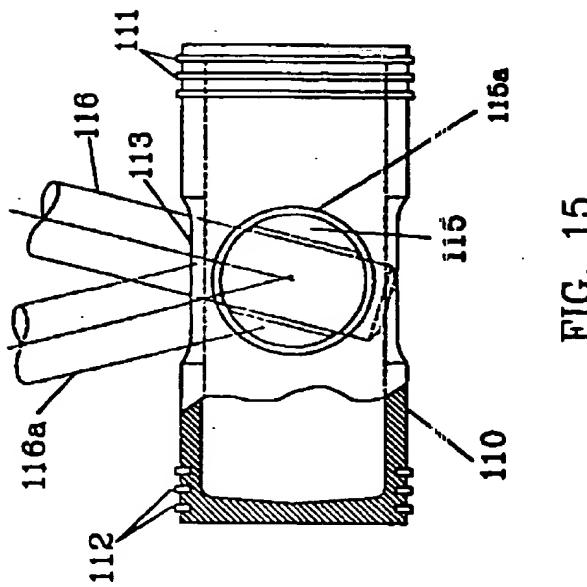
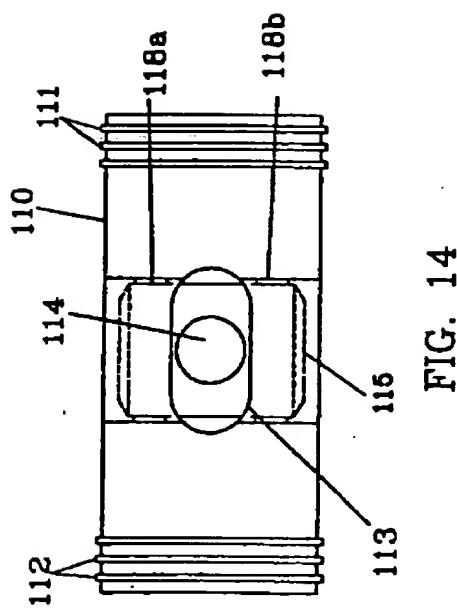
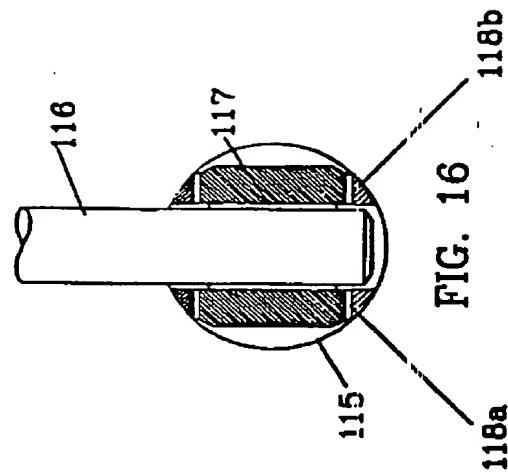


FIG. 13

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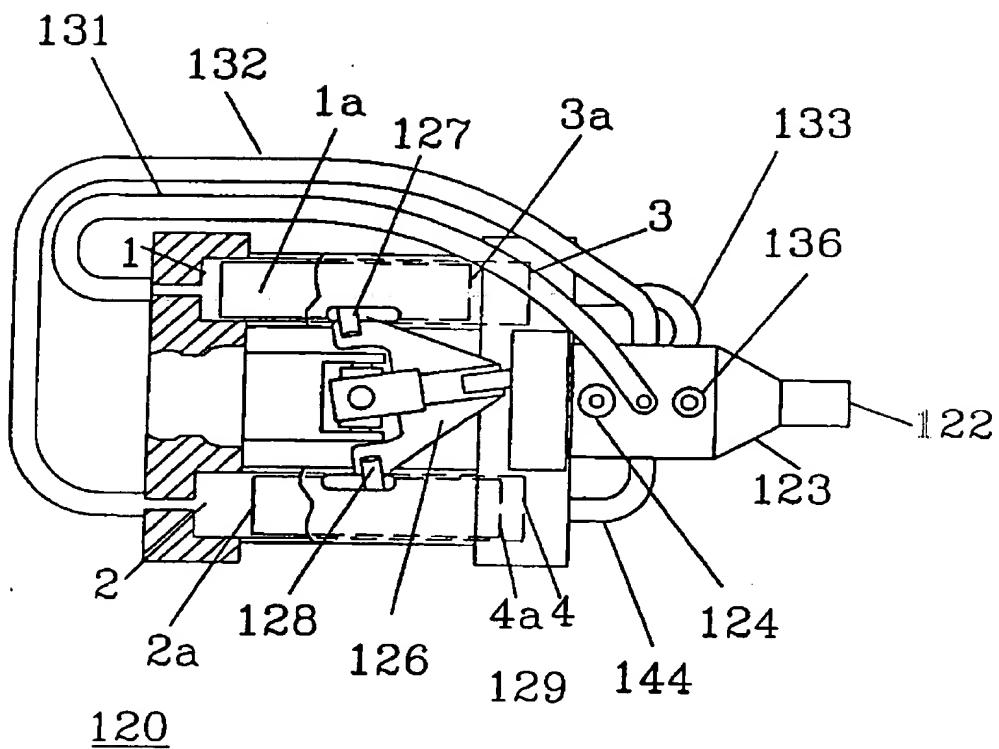


FIG. 17

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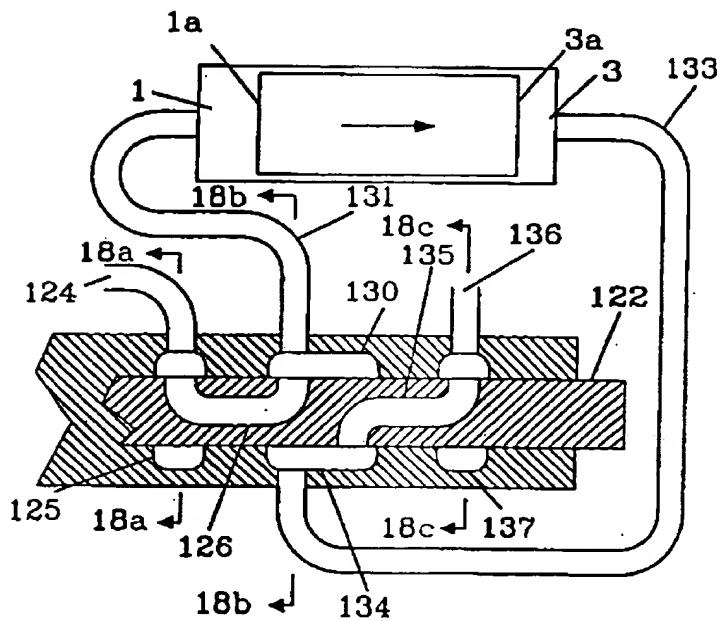


FIG. 18

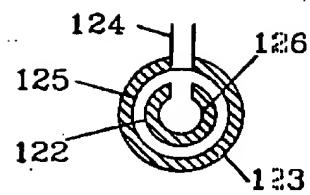


FIG. 18a

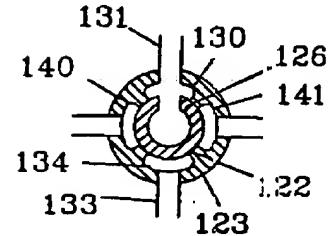


FIG. 18b

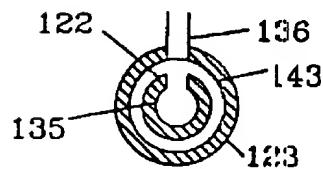


FIG. 18c

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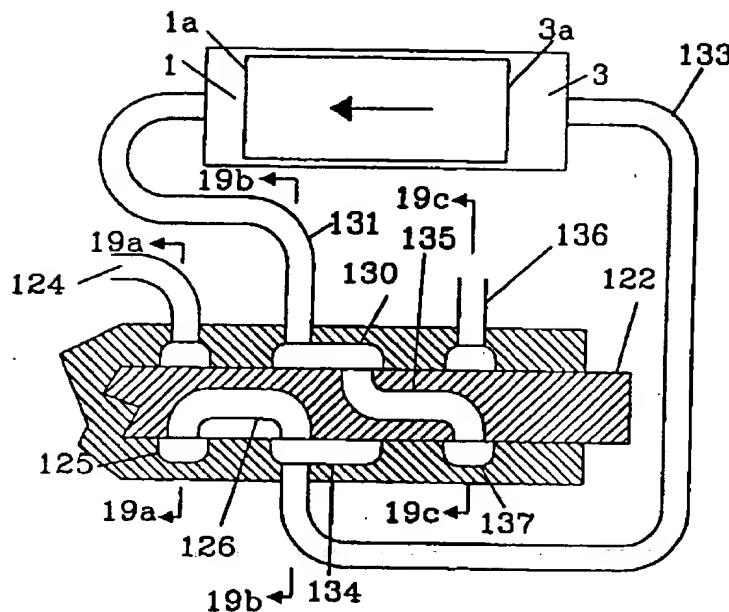


FIG. 19

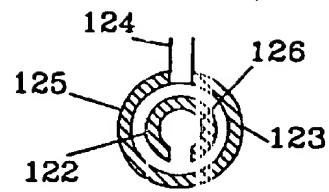


FIG. 19a

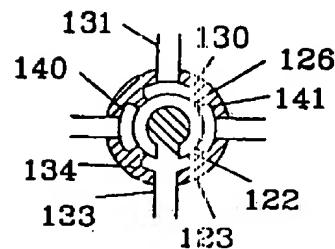


FIG. 19b

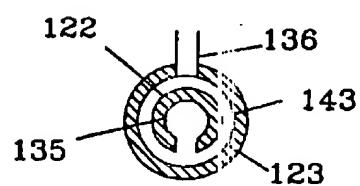


FIG. 19c

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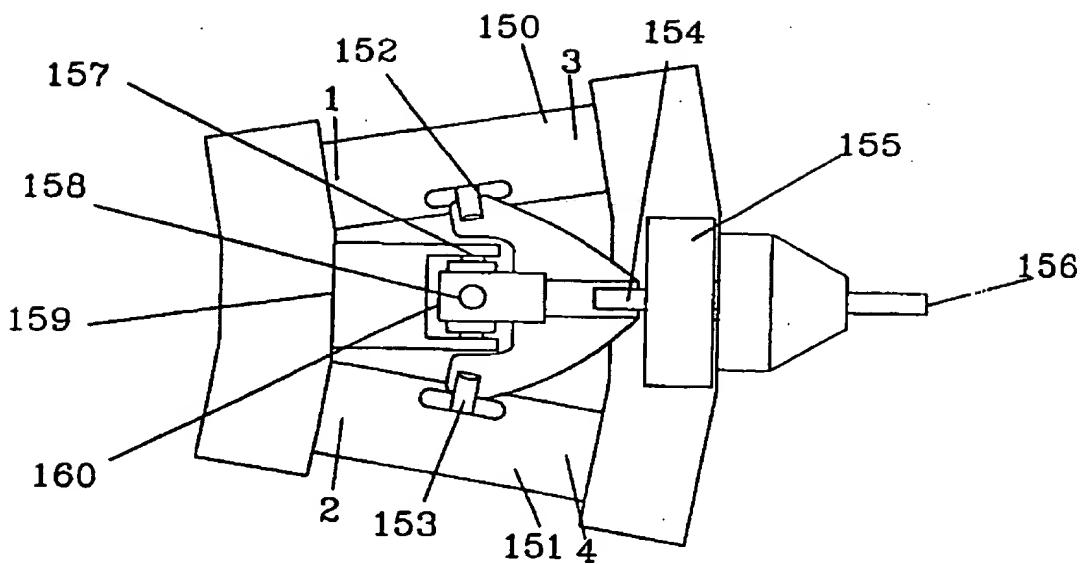


FIG. 20

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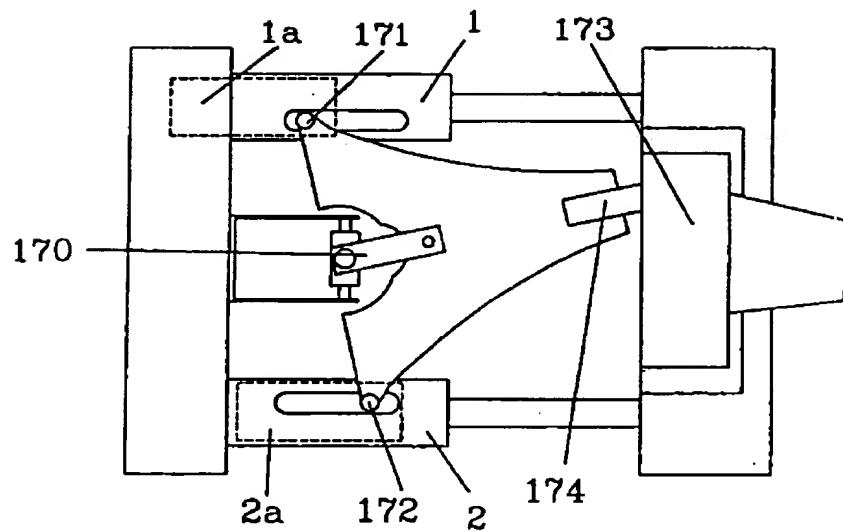


FIG. 21

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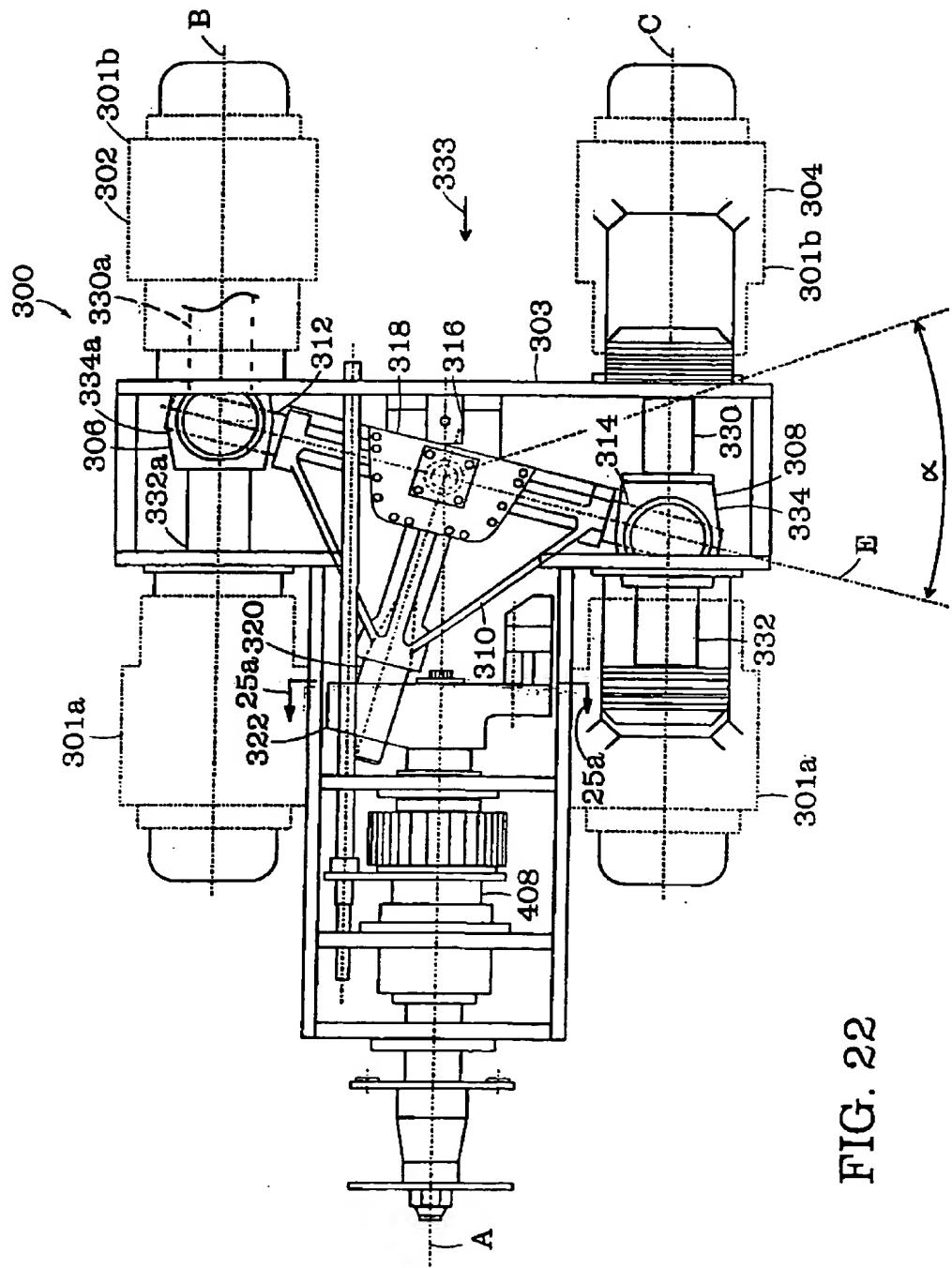
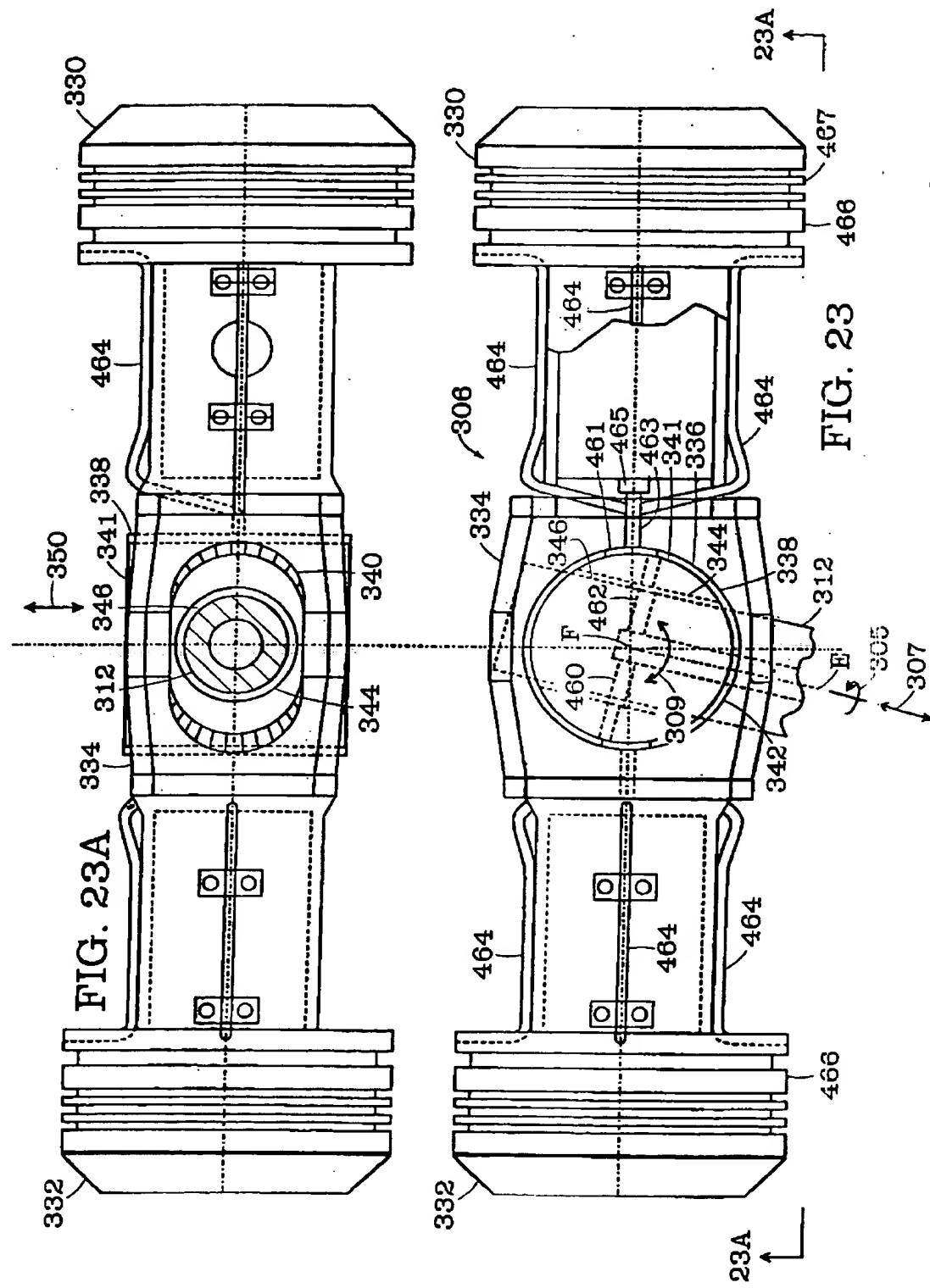


FIG. 22

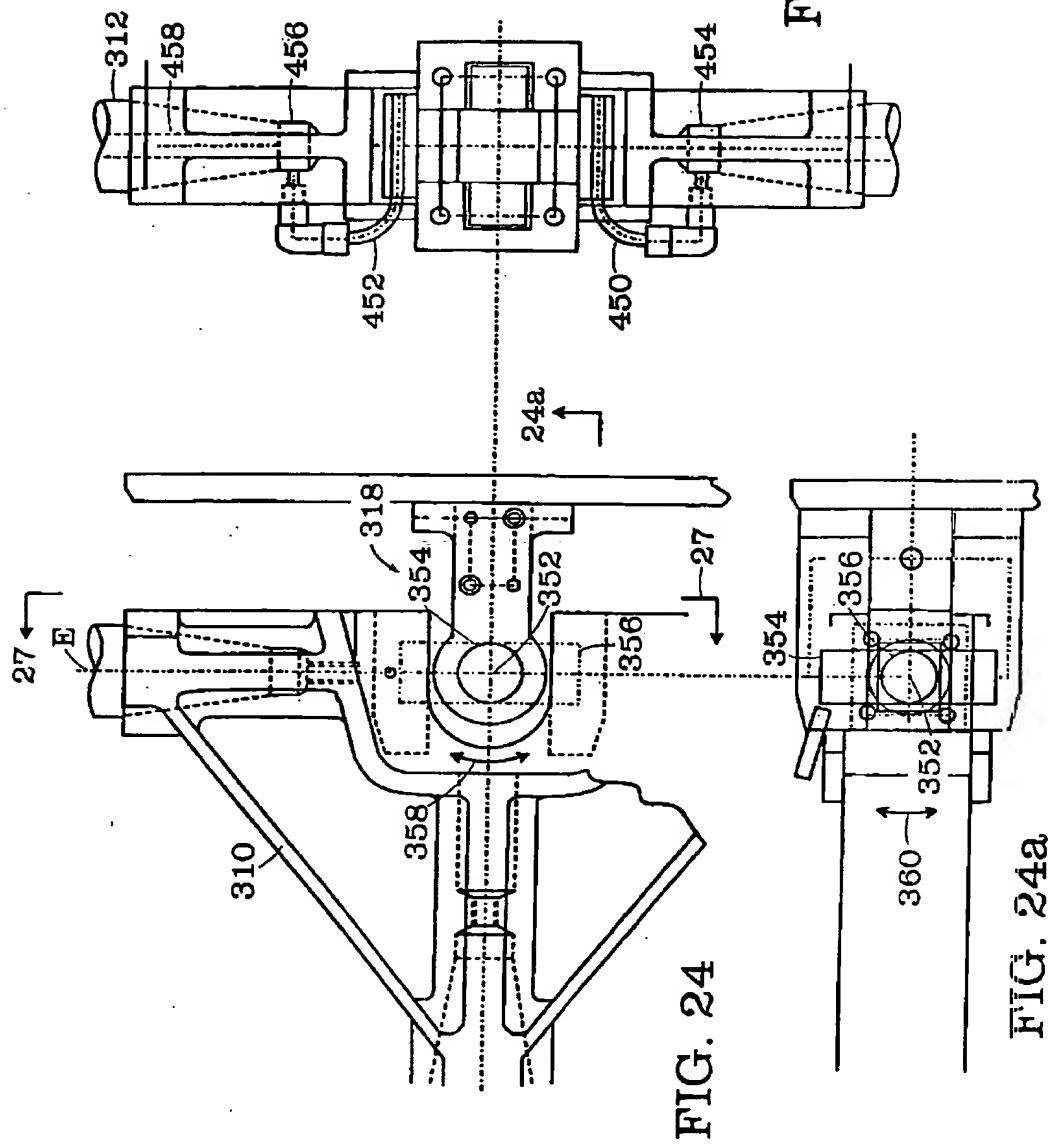
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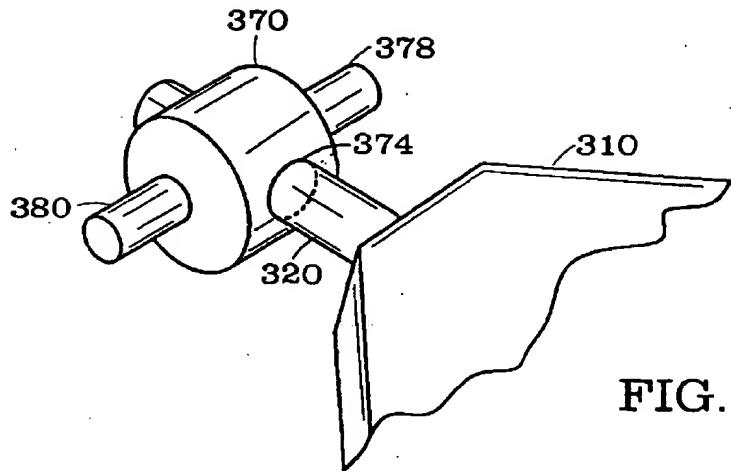


FIG. 25

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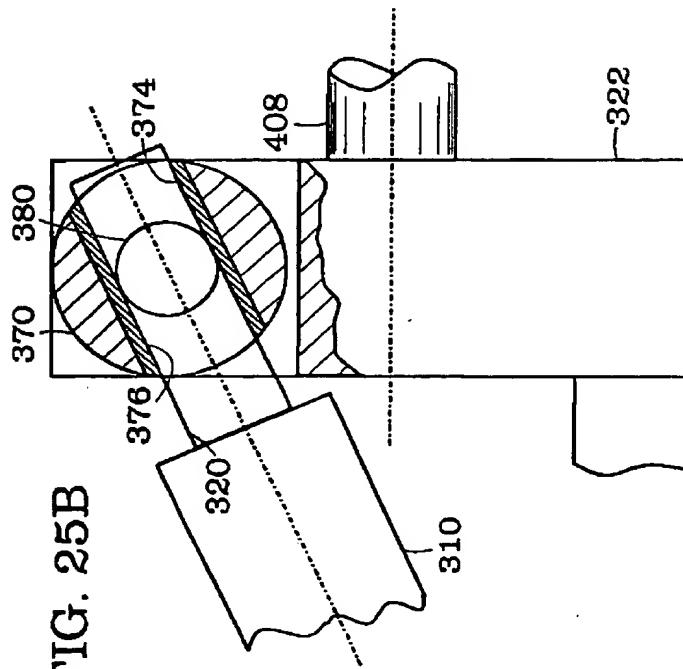


FIG. 25B

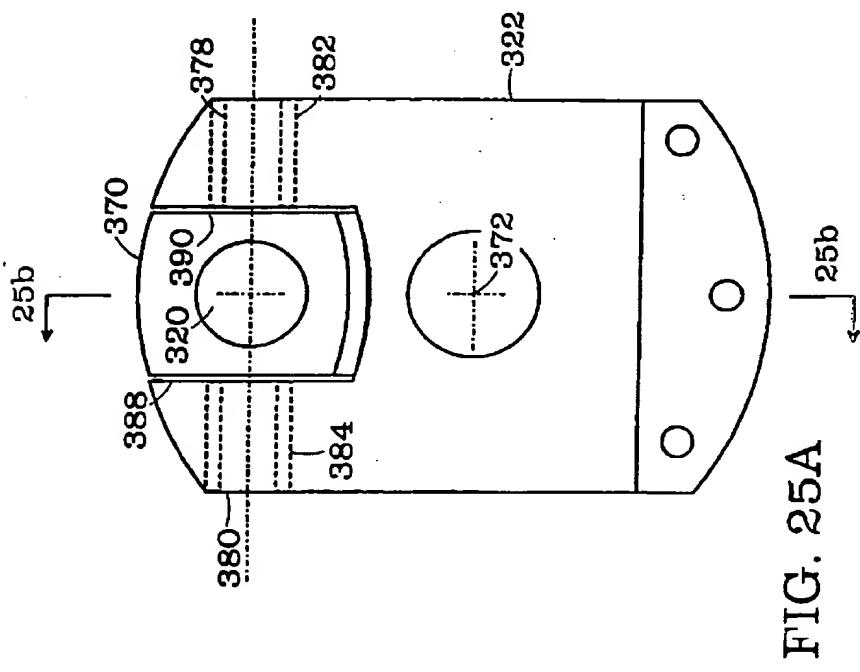


FIG. 25A

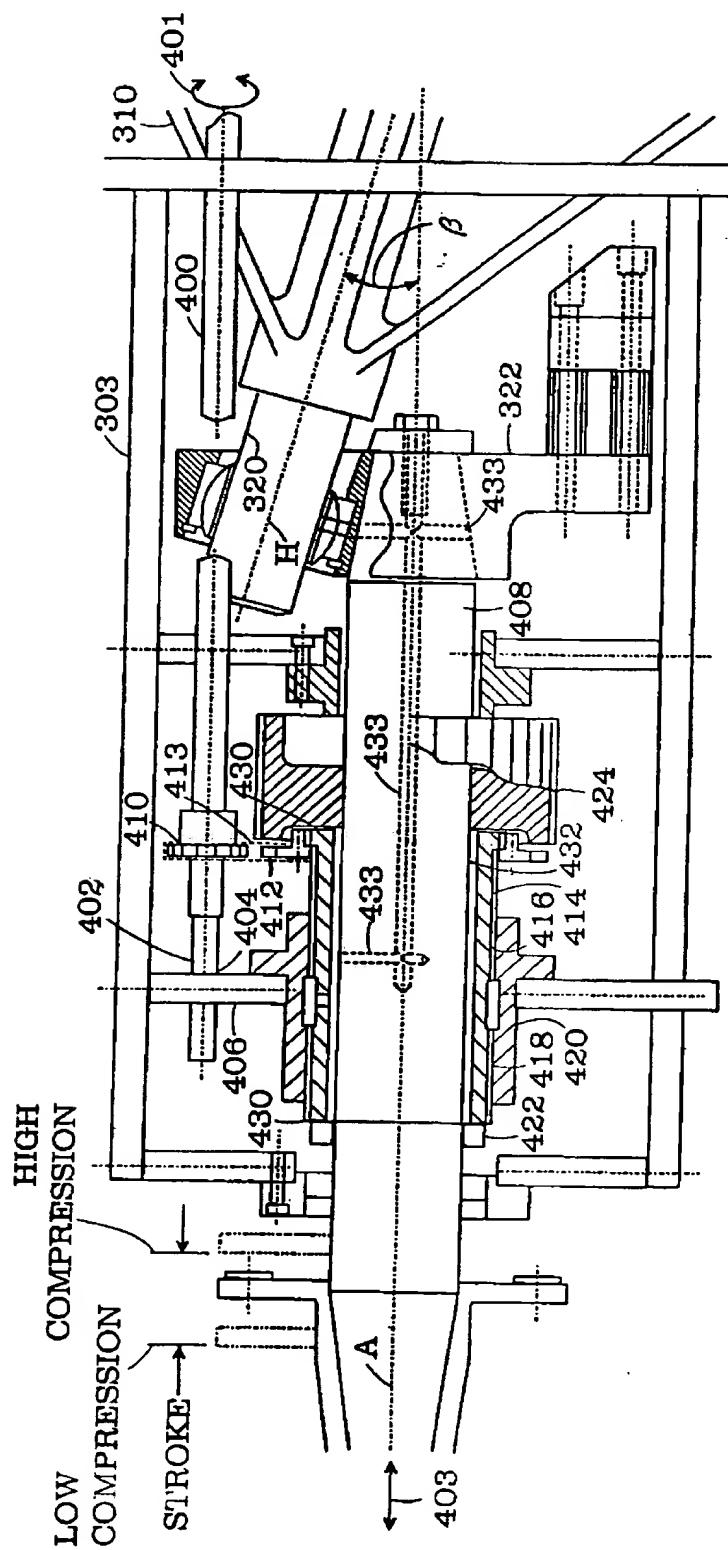


FIG. 26

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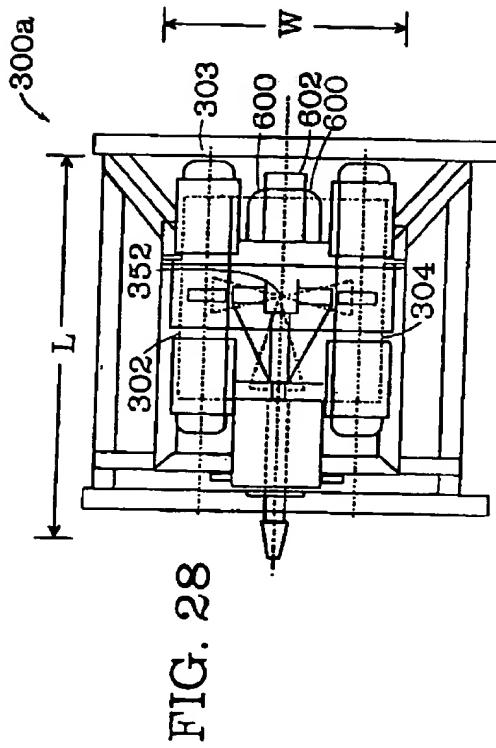


FIG. 28

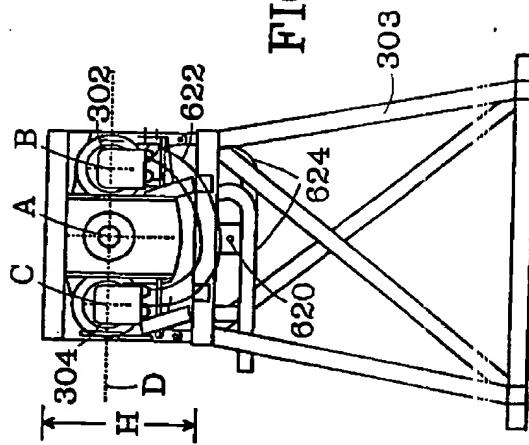


FIG. 28a

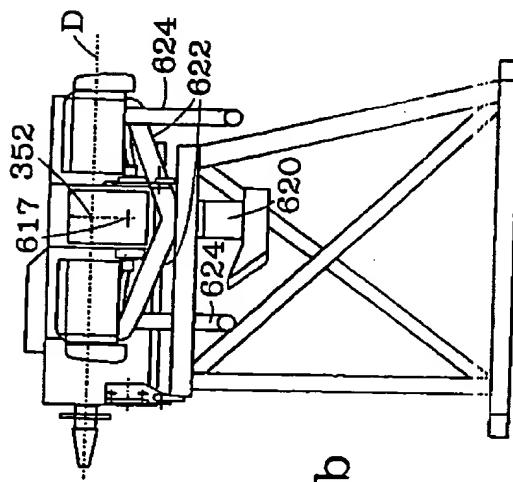
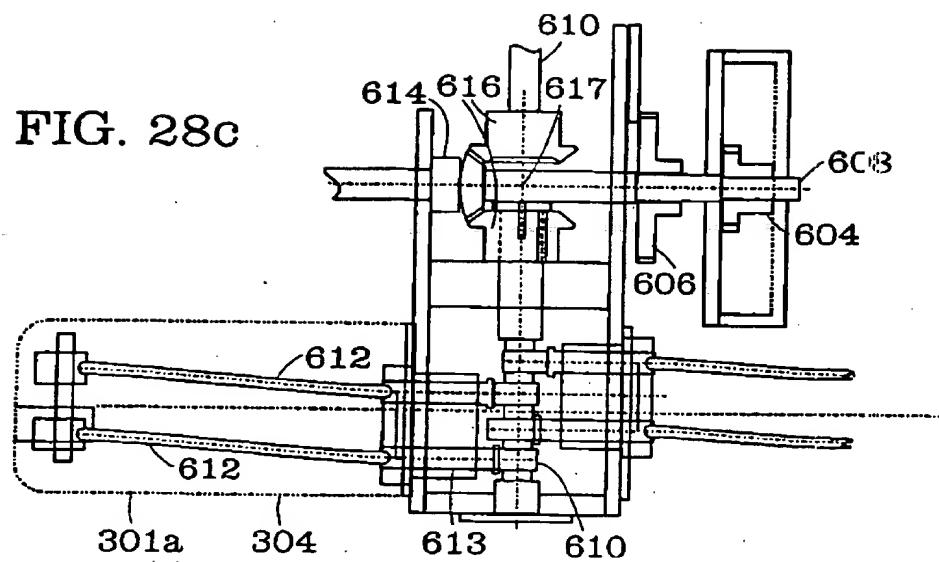


FIG. 28b

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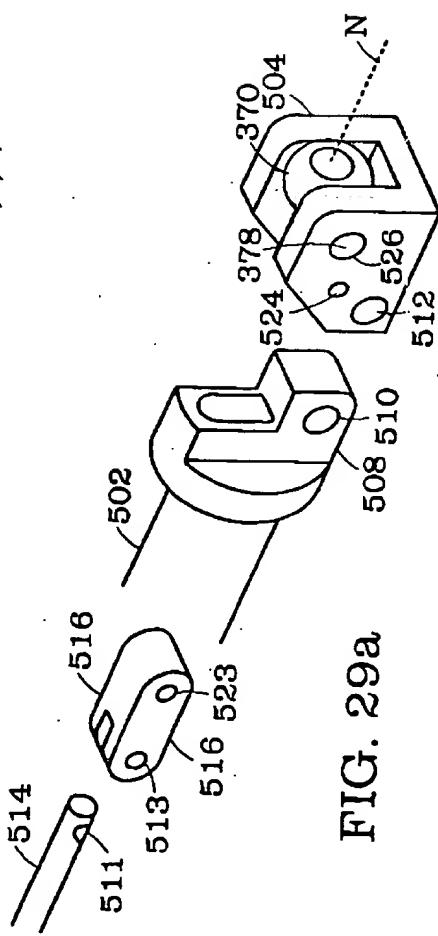
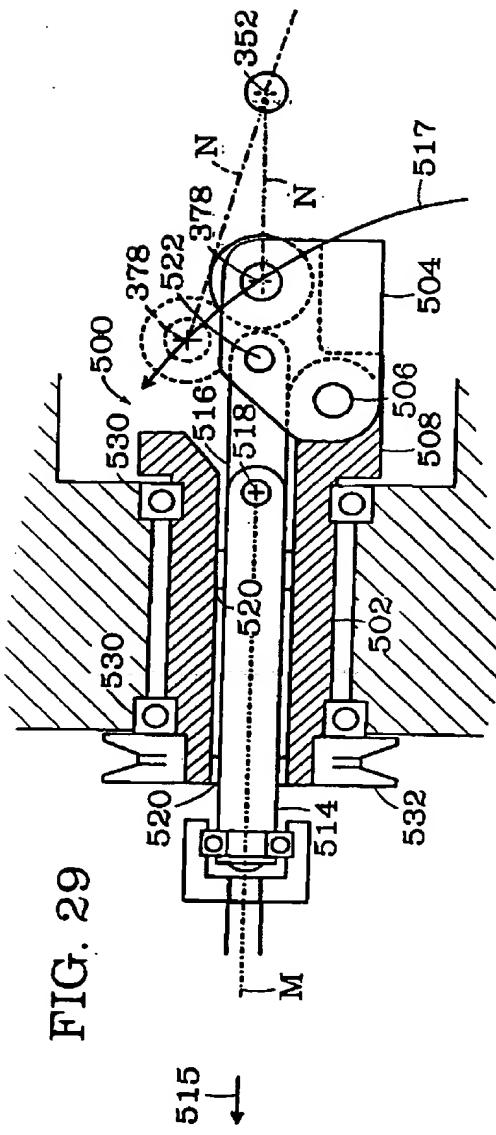
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FIG. 28c



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FIGURE EIGHT MOTION OF PISTON ARMS
CROSS U-JOINT, WORST CASE DEVIATION

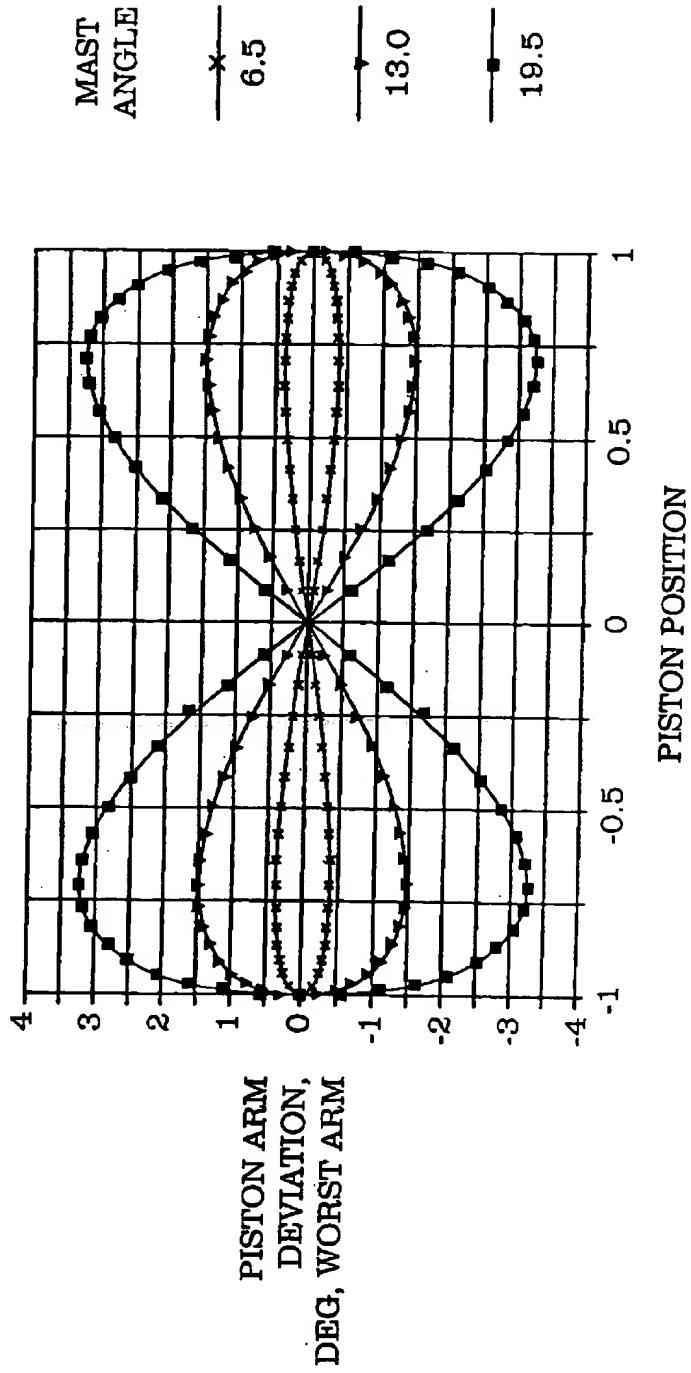


FIG. 30

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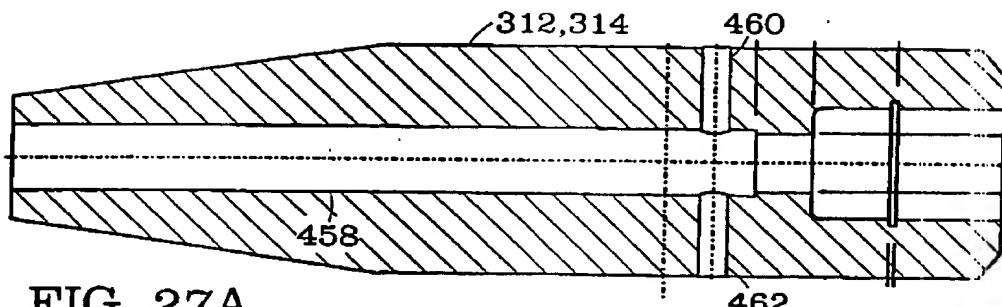


FIG. 27A

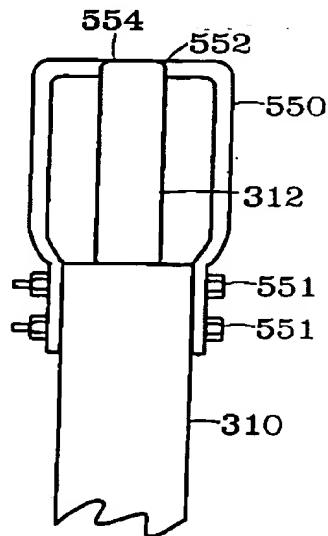


FIG. 31

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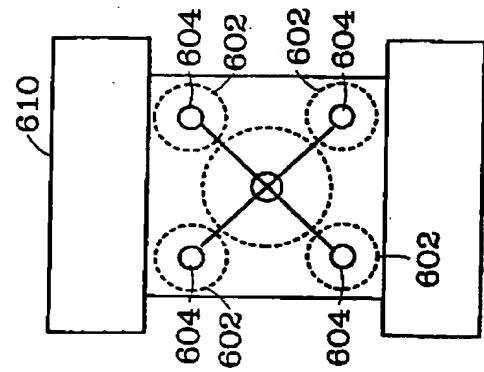


FIG. 32a

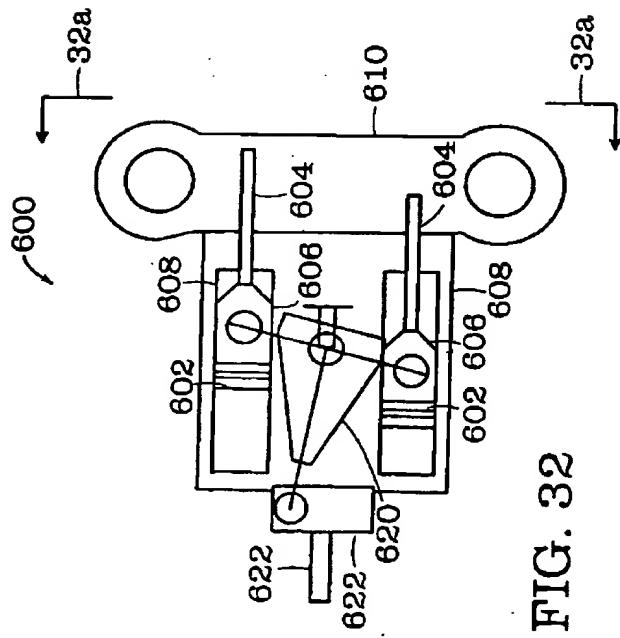


FIG. 32

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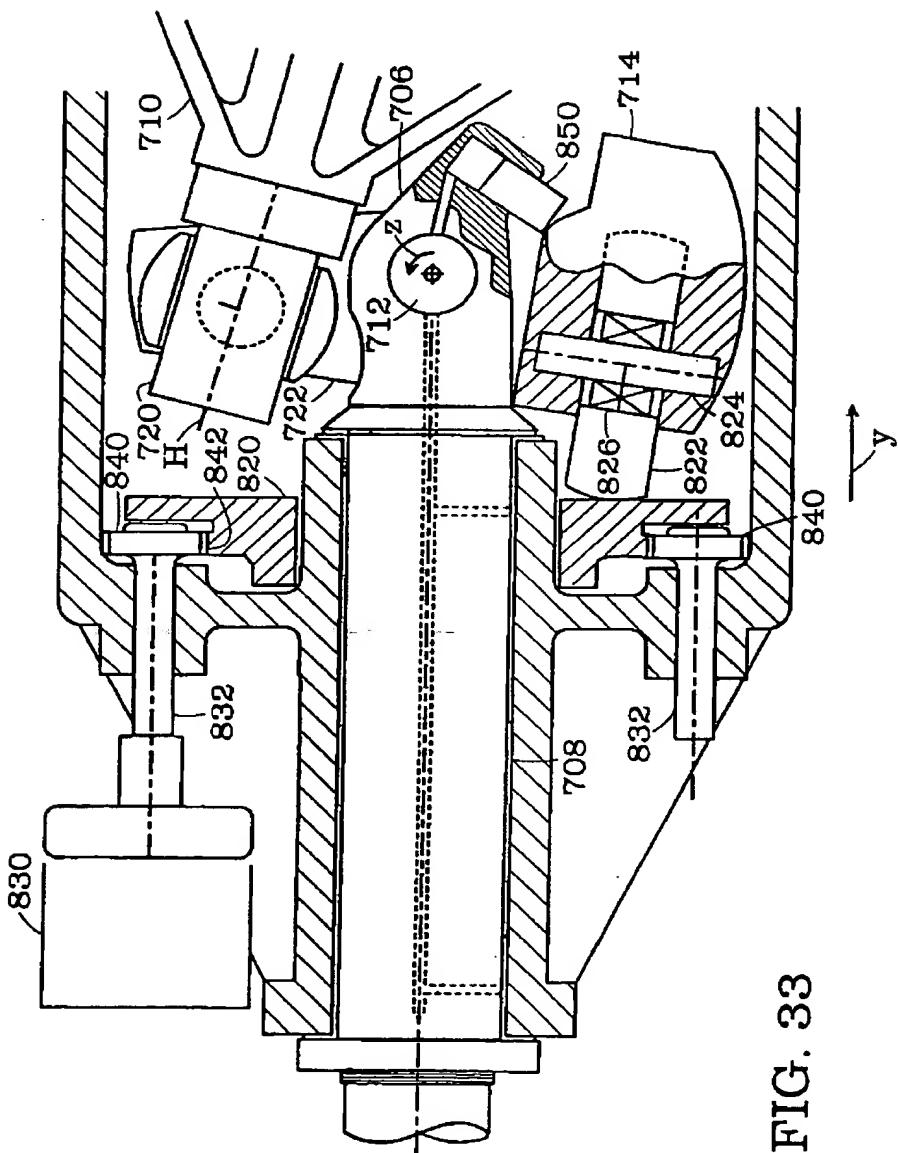


FIG. 33

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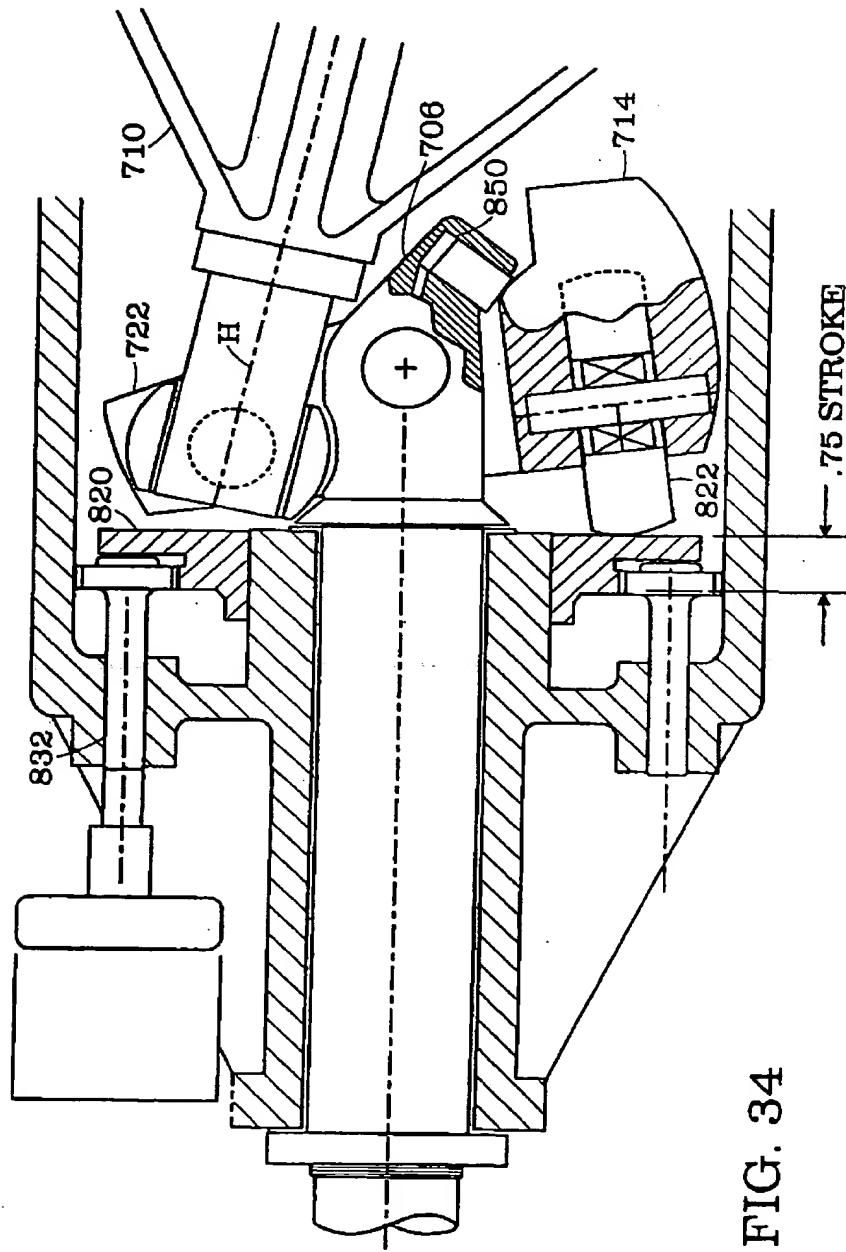


FIG. 34

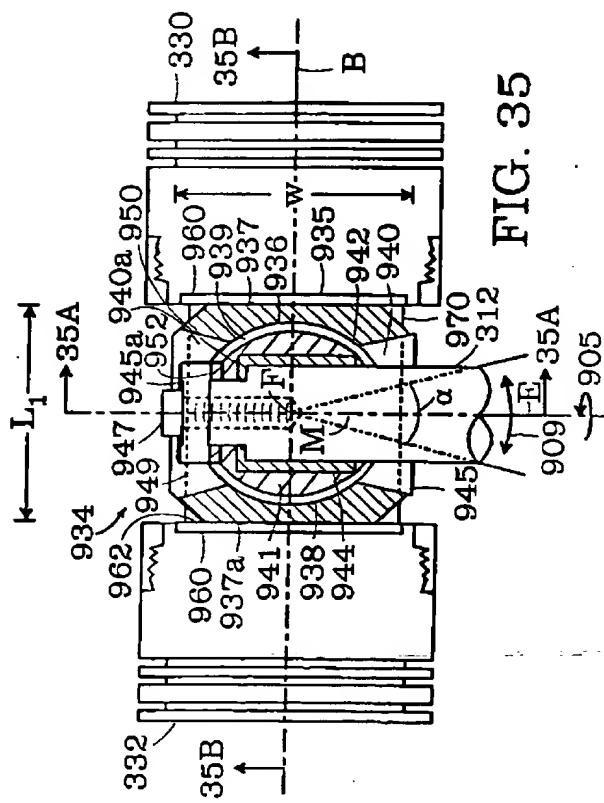


FIG. 35

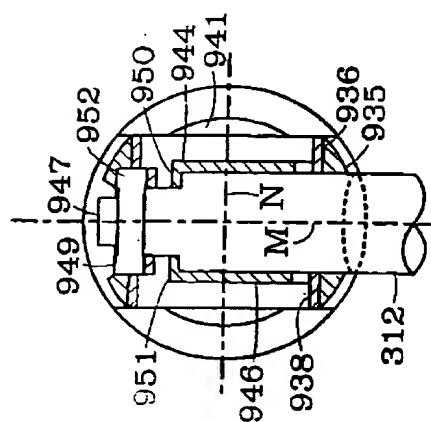


FIG. 35A

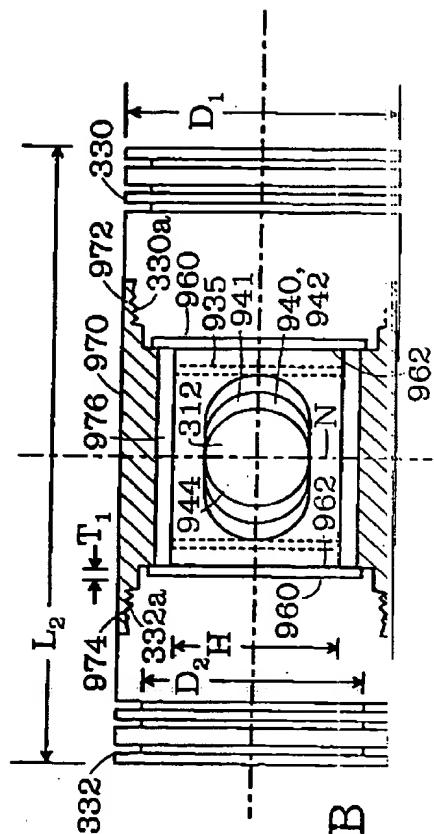


FIG. 35B

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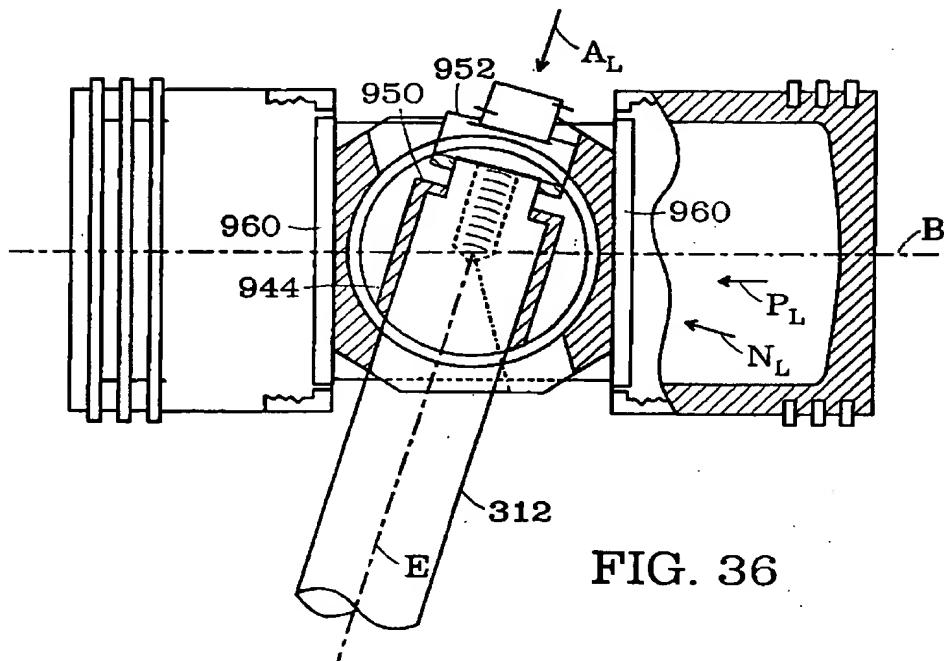


FIG. 36

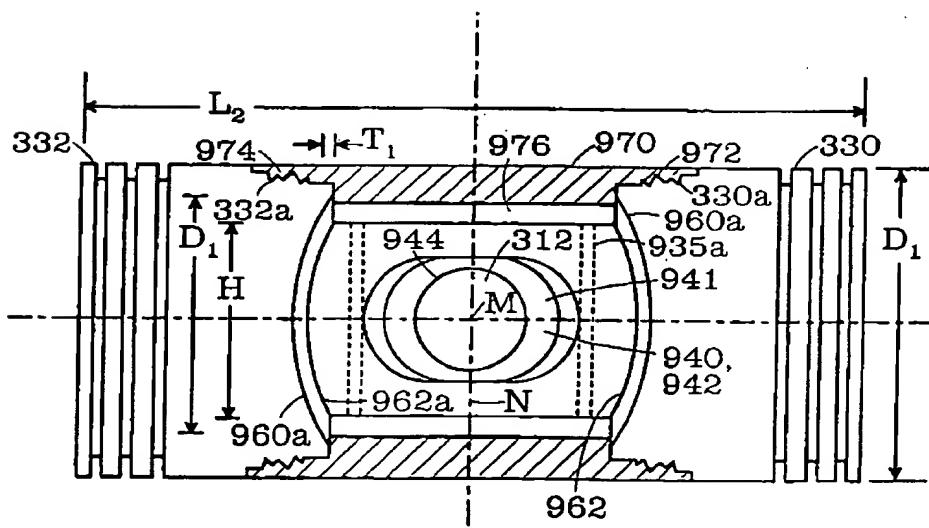


FIG. 37

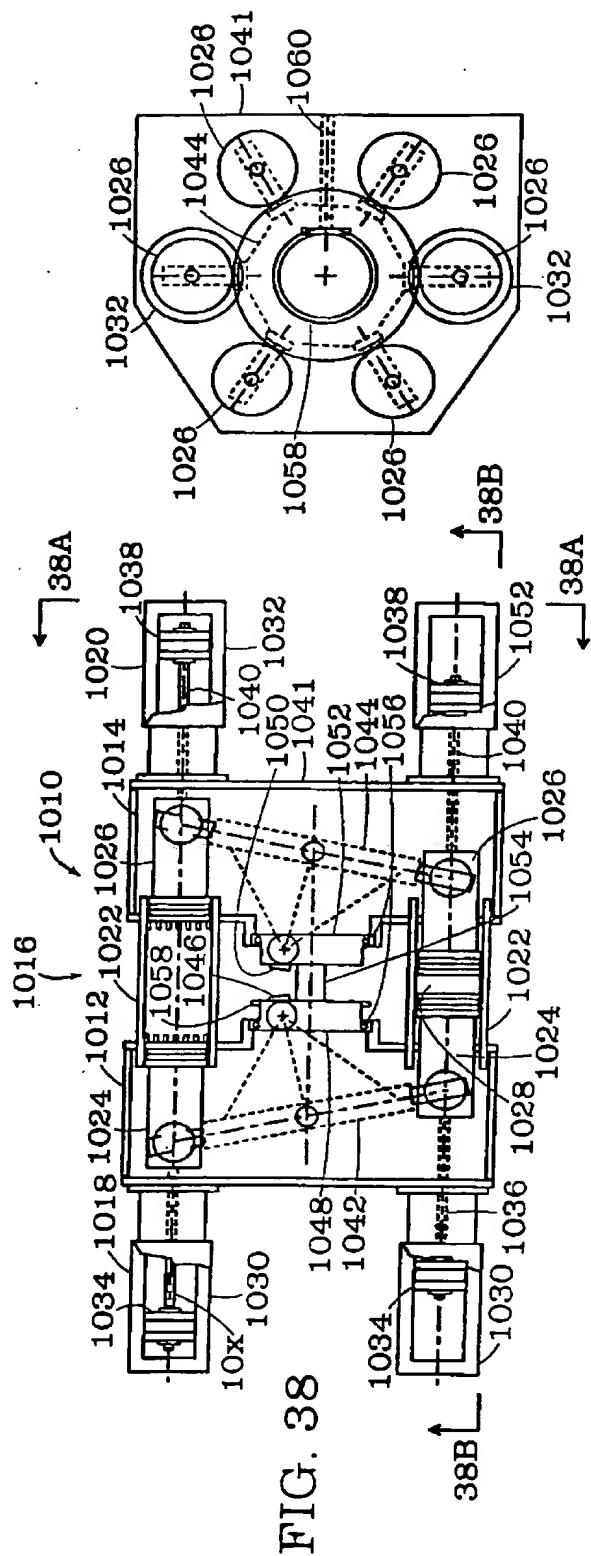


FIG. 38A

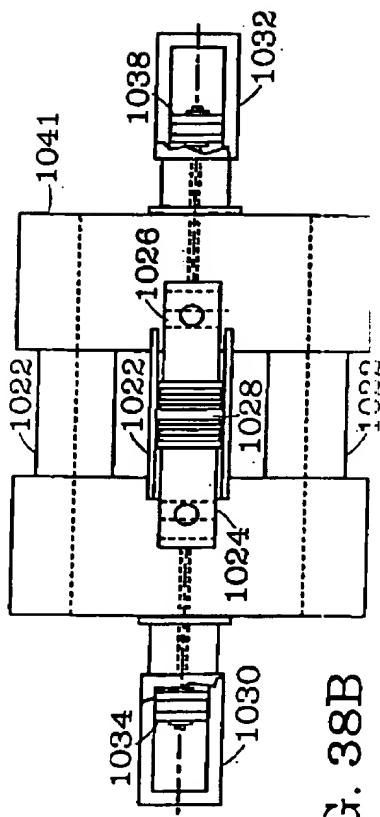


FIG. 38B